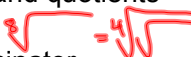


## Test Friday on 5.5-5.9

### 5.5 Roots of Real Numbers

- principal root (positive) when simplifying
- breakdown to primes and look for groups of 2 or 3 or 4--whatever the index is

### 5.6 Radical Expressions

- properties to help simplify
- break apart products and quotients
- break apart the index 
- Rationalize the denominator
- add/subtract--combine like terms

### 5.7 Rational Exponents

- numerator is power
- denominator is index

### 5.8 Radical Equations and inequalities

- Isolate radical, "square" both sides, solve, and check
- With inequalities, set radicand  $\geq 0$ , use number line to check

### 5.9 Complex Numbers

- $i^2 = -1$
- $\sqrt{-1} = i$
- no imaginary #s in denominator
- simplify before multiply

5.5 p278 #s 36-41

**p838-839**

5.6 #s 2, 4, 6, 14, 18, 22, 24, 30

5.7 #s 1, 3, 5, 6, 17, 20, 21, 24, 27-29

5.8 #s 2, 3, 8, 13

5.9 #s 1, 2, 4, 8, 10, 18, 19

Answers will be on wiki